

Baseline Noise Measurement Field Data

Field Noise Measurement Data

Record: 2040

Project Name	Santee Recreation Center
Project #	14169
Date	2025-02-10

Meteorological Conditions

Upload NOAA Forecast

2:21
5G+

Current conditions at
EW3619 Santee (E3619)
Lat: 32.85417°N Lon: 117°W Elev: 414.0ft.

NA
61°F
16°C

Humidity 1%
Wind Speed WSW 7 MPH
Barometer 29.98 in (1015.24 mb)
Dewpoint -39°F (-39°C)
Visibility NA
Last update 10 Feb 02:00 PM PST

[More Local Wx](#) |
 [3 Day History](#) |
 [Hourly Weather Forecast](#)

Extended Forecast for
Santee CA

Click here for hazard details and duration

This Afternoon	Tonight	Tuesday
 High: 65 °F Sunny	 Low: 41 °F Patchy Fog	 High: 61 °F Slight Chance Showers ther Mostly Sunny

Detailed Forecast

View in Desktop Mode

forecast.weather.gov

FORMS DUDEK FIELD DATA REPORT

Temp (F)	61
Humidity % (R.H.)	1
Wind	Calm
Wind Speed (MPH)	7
Wind Direction	West
Sky	Clear

Instrument and Calibrator Information

Instrument Name List	(SAC) NL-62
Instrument Name	(SAC) NL-62
Instrument Name Lookup Key	(SAC) NL-62
Manufacturer	Rion
Model	NL-62
Serial Number	350815
Calibration Date	
Calibrator Name	(SAC) Rion NC-74
Calibrator Name	(SAC) Rion NC-74
Calibrator Name Lookup Key	(SAC) Rion NC-74
Calibrator Manufacturer	Rion
Calibrator Model	NC-74
Calibrator Serial #	34167529
Pre-Test (dBA SPL)	94.2
Post-Test (dBA SPL)	94

Windscreen	Yes
Weighting?	A-WTD
Slow/Fast?	Slow
ANSI?	Yes

Monitoring	
Record #	1
Site ID	ST1
Site Location Lat/Long	32.851636, -116.978515
Begin (Time)	14:30:00
End (Time)	14:45:00
Leq	55.1
Lmax	66.8
Lmin	47.5
Other Lx?	L90, L50, L10
L90	48.4
L50	50.4
L10	53.4
Other Lx (Specify Metric)	L
Primary Noise Source	Traffic
Other Noise Sources (Background)	Birds, Distant Aircraft, Distant Conversations / Yelling
Other Noise Sources Additional Description	Traffic on Riverwalk Dr, distant aircraft, activity at nearby park
Is the same instrument and calibrator being used as previously noted?	Yes

Are the meteorological conditions the same as previously noted?

Yes

Source Info and Traffic Counts

Number of Lanes

2

Lane Width (feet)

6

Roadway Width (feet)

12

Roadway Width (m)

3.7

Distance to Roadway (feet)

20

Distance to Roadway (m)

6.1

Distance Measured to Centerline or Edge of Pavement?

Centerline

Estimated Vehicle Speed (MPH)

25

Traffic Counts

Vehicle Count Summary

A 39, MT 0, HT 0, B 0, MC 0

Select Method for Recording Count Duration

Enter Manually

Counting Both Directions?

No

Count Duration (minutes)

15

Direction

EB

Vehicle Count Tally

Select Method for Vehicle Counts

Use Counter (+/-)

Number of Vehicles - Autos

39

Number of Vehicles - Medium Trucks

0

FORMS FIELD DATA REPORT

Number of Vehicles - Heavy Trucks	0
Number of Vehicles - Buses	0
Number of Vehicles - Motorcycles	0

Traffic Counts	
Vehicle Count Summary	A 26, MT 0, HT 0, B 0, MC 0
Select Method for Recording Count Duration	Enter Manually
Counting Both Directions?	No
Count Duration (minutes)	15
Direction	WB
Vehicle Count Tally	
Select Method for Vehicle Counts	Use Counter (+/-)
Number of Vehicles - Autos	26
Number of Vehicles - Medium Trucks	0
Number of Vehicles - Heavy Trucks	0
Number of Vehicles - Buses	0
Number of Vehicles - Motorcycles	0

Description / Photos	
Terrain	Hard

Site Photos

Photo



Comments / Description

Facing W

Site Photos

Photo	
Comments / Description	<i>Facing S</i>

Site Photos

Photo	
Comments / Description	Facing E

Site Photos

Photo	 A photograph of a two-story house with a stone wall in the foreground and a camera on a tripod. The house has a brown stucco exterior and a tiled roof. A balcony with a metal railing is visible on the second floor. The camera is positioned on a tripod in front of the stone wall, pointing towards the house.
Comments / Description	Facing N

Monitoring	
Record #	2
Site ID	ST2
Site Location Lat/Long	32.851692, -116.976215

FORMS FIELD DATA REPORT

Begin (Time)	14:50:00
End (Time)	15:05:00
Leq	50.7
Lmax	62.1
Lmin	43.5
Other Lx?	L90, L50, L10
L90	44.2
L50	45.9
L10	52.2
Other Lx (Specify Metric)	L
Primary Noise Source	Traffic
Other Noise Sources (Background)	Birds, Distant Aircraft, Distant Conversations / Yelling
Other Noise Sources Additional Description	Traffic on Riverwalk Dr, aircraft, park activity. Helicopter flyover near adjacent hospital
Is the same instrument and calibrator being used as previously noted?	Yes
Are the meteorological conditions the same as previously noted?	Yes

Source Info and Traffic Counts	
Number of Lanes	2
Lane Width (feet)	6
Roadway Width (feet)	12
Roadway Width (m)	3.7
Distance to Roadway (feet)	20

FORMS FIELD DATA REPORT

Distance to Roadway (m)	6.1
Distance Measured to Centerline or Edge of Pavement?	Centerline
Estimated Vehicle Speed (MPH)	25

Traffic Counts	
Vehicle Count Summary	A 25, MT 0, HT 0, B 0, MC 0
Select Method for Recording Count Duration	Enter Manually
Counting Both Directions?	No
Count Duration (minutes)	15
Direction	EB
Vehicle Count Tally	
Select Method for Vehicle Counts	Use Counter (+/-)
Number of Vehicles - Autos	25
Number of Vehicles - Medium Trucks	0
Number of Vehicles - Heavy Trucks	0
Number of Vehicles - Buses	0
Number of Vehicles - Motorcycles	0

Traffic Counts	
Vehicle Count Summary	A 9, MT 0, HT 0, B 0, MC 0
Select Method for Recording Count Duration	Enter Manually
Counting Both Directions?	No

FORMS FIELD DATA REPORT

Count Duration (minutes)	15
Direction	WB
Vehicle Count Tally	
Select Method for Vehicle Counts	Use Counter (+/-)
Number of Vehicles - Autos	9
Number of Vehicles - Medium Trucks	0
Number of Vehicles - Heavy Trucks	0
Number of Vehicles - Buses	0
Number of Vehicles - Motorcycles	0

Description / Photos	
Terrain	Hard

Site Photos	
Photo	

FORMS DUDEK FIELD DATA REPORT	
Comments / Description	Facing E

Site Photos	
Photo	
Comments / Description	Facing S

Site Photos

Photo



Comments / Description

Facing W

Site Photos

Photo



Comments / Description

Facing N

Monitoring

Record #

3

Site ID

ST4

Site Location Lat/Long

32.850467, -116.976726

FORMS FIELD DATA REPORT

Begin (Time)	15:11:00
End (Time)	15:26:00
Leq	48.9
Lmax	53
Lmin	46
Other Lx?	L90, L50, L10
L90	46.3
L50	48
L10	51.6
Other Lx (Specify Metric)	L
Primary Noise Source	Traffic
Other Noise Sources (Background)	Birds, Distant Aircraft, Distant Conversations / Yelling, Distant Dog Barking
Other Noise Sources Additional Description	Aircraft, car alarm at adjacent hospital, traffic on Riverwalk Dr and in parking lot, activity at nearby park/soccer fields
Is the same instrument and calibrator being used as previously noted?	Yes
Are the meteorological conditions the same as previously noted?	Yes

Description / Photos	
Terrain	Mixed

Site Photos	
Photo	
Comments / Description	Facing E

Photo	
Comments / Description	<i>Facing S</i>

Site Photos

Photo	
Comments / Description	Facing W

Site Photos

Photo



Comments / Description

Facing N

Monitoring

Record #

4

Site ID

ST3

Site Location Lat/Long

32.850620, -116.973442

FORMS FIELD DATA REPORT

Begin (Time)	15:32:00
End (Time)	15:47:00
Leq	42.6
Lmax	44.8
Lmin	41.1
Other Lx?	L90, L50, L10
L90	41.6
L50	42.4
L10	44
Other Lx (Specify Metric)	L
Primary Noise Source	Aircraft
Other Noise Sources (Background)	Birds, Distant Aircraft, Distant Conversations / Yelling, Distant Dog Barking, Distant Traffic, Rustling Leaves
Other Noise Sources Additional Description	Aircraft, intermittent residential traffic on Cottonwood Ave, distant conversations/yelling at adjacent park/soccer field, birds
Is the same instrument and calibrator being used as previously noted?	Yes
Are the meteorological conditions the same as previously noted?	Yes

Description / Photos	
Terrain	Mixed

Site Photos

Photo



Comments / Description

Facing E

Site Photos

Photo	
Comments / Description	Facing S

Site Photos

Photo	
Comments / Description	Facing W

Site Photos

Photo	
Comments / Description	Facing N

Construction Noise Prediction Model Worksheets

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase at residential land use, per FTA guidance =	80
allowable hours over which Leq is to be averaged =	8

0 = temporary barrier (TB) of input height inserted between source and receptor

Construction Activity	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Temporary Barrier Insertion Loss (dB)	Additional Noise Reduction	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq	Source Elevation (ft)	Receiver Elevation (ft)	Barrier Height (ft)	Source to Barr. ("A") Horiz. (ft)	Rcvr. to Barr. ("B") Horiz. (ft)	Source to Rcvr. ("C") Horiz. (ft)	"A" (ft)	"B" (ft)	"C" (ft)	Path Length Diff. "P" (ft)	Abarr (dB)	Heff (with barrier)	Heff (wout barrier)	G (with barrier)	G (without barrier)	ILbarr (dB)
Demolition	dozer	1	40	82		80	0.1		76.6	8	480	73	5	5	0	10	70	80	11.2	70.2	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	1	40	82		250	0.1		63.7	8	480	60	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	concrete saw	1	20	90		250	0.1		71.7	8	480	65	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	3	40	78		250	0.1		59.7	8	480	61	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
Total for Demolition Phase:												73.7																
Site Preparation	backhoe	4	40	78		250	0.1		59.7	8	480	62	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	1	40	82		80	0.1		76.6	8	480	73	5	5	0	10	70	80	11.2	70.2	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	2	40	82		250	0.1		63.7	8	480	63	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
Total for Site Preparation Phase:												73.4																
Grading	dozer	1	40	82		250	0.1		63.7	8	480	60	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	3	40	78		250	0.1		59.7	8	480	61	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	excavator	1	40	81		250	0.1		62.7	8	480	59	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	grader	1	40	85		80	0.1		79.6	8	480	76	5	5	0	10	70	80	11.2	70.2	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
Total for Grading Phase:												76.0																
Building Construction	crane	1	16	81		80	0.1		75.6	7	420	67	5	5	0	10	70	80	11.2	70.2	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	man lift	3	20	75		250	0.1		56.7	8	480	55	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	3	40	78		250	0.1		59.7	8	480	61	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	welder / torch	1	40	73		250	0.1		54.7	8	480	51	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	generator	1	50	72		250	0.1		53.7	8	480	51	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
Total for Building Construction Phase:												68.3																
Paving	paver	1	50	77		250	0.1		58.7	8	480	56	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	concrete mixer truck	2	40	79		250	0.1		60.7	6	360	59	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	roller	1	20	80		80	0.1		74.6	6	360	66	5	5	0	10	70	80	11.2	70.2	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	roller	1	20	80		250	0.1		61.7	8	480	55	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		250	0.1		59.7	8	480	56	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	paver	2	50	77	"paving equipment"	250	0.1		58.7	6	360	57	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
Total for Paving Phase:												68.3																
Architectural Coating	compressor (air)	1	40	78		80	0.1		72.6	6	360	67	5	5	0	10	70	80	11.2	70.2	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
Total for Architectural Coating Phase:												67.4																

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase for sensitive wildlife = 60
allowable hours over which Leq is to be averaged = 1

0 = temporary barrier (TB) of input height inserted between source and receptor

Construction Activity	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Temporary Barrier Insertion Loss (dB)	Additional Noise Reduction	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 1-hour Leq	Source Elevation (ft)	Receiver Elevation (ft)	Barrier Height (ft)	Source to Barr. ("A") Horiz. (ft)	Rcvr. to Barr. ("B") Horiz. (ft)	Source to Rcvr. ("C") Horiz. (ft)	"A" (ft)	"B" (ft)	"C" (ft)	Path Length Diff. "P" (ft)	Abarr (dB)	Heff (with barrier)	Heff (wout barrier)	G (with barrier)	G (without barrier)	ILbarr (dB)
Demolition	dozer	1	40	82		25	0.1		87.9	0.08	4.8	73	5	5	0	10	15	25	11.2	15.8	25.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	1	40	82		250	0.1		63.7	1	60	60	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	concrete saw	1	20	90		250	0.1		71.7	1	60	65	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	3	40	78		250	0.1		59.7	1	60	61	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
Total for Demolition Phase:												74.0																
Site Preparation	backhoe	4	40	78		250	0.1		59.7	1	60	62	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	1	40	82		25	0.1		87.9	0.08	4.8	73	5	5	0	10	15	25	11.2	15.8	25.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	2	40	82		250	0.1		63.7	1	60	63	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
Total for Site Preparation Phase:												73.7																
Grading	dozer	1	40	82		250	0.1		63.7	1	60	60	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	3	40	78		250	0.1		59.7	1	60	61	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	excavator	1	40	81		250	0.1		62.7	1	60	59	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	grader	1	40	85		25	0.1		90.9	0.08	4.8	76	5	5	0	10	15	25	11.2	15.8	25.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
Total for Grading Phase:												76.0																
Building Construction	crane	1	16	81		75	0.1		76.6	1	60	69	5	5	0	60	15	75	60.2	15.8	75.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	man lift	3	20	75		250	0.1		56.7	1	60	55	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		25	0.1		83.9	0.08	4.8	69	5	5	0	10	15	25	11.2	15.8	25.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	2	40	78		250	0.1		59.7	1	60	59	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	welder / torch	1	40	73		250	0.1		54.7	1	60	51	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	generator	1	50	72		250	0.1		53.7	1	60	51	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
Total for Building Construction Phase:												72.2																
Paving	paver	1	50	77		250	0.1		58.7	1	60	56	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	concrete mixer truck	2	40	79		250	0.1		60.7	1	60	60	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	roller	1	20	80		25	0.1		85.9	0.08	4.8	68	5	5	0	10	15	25	11.2	15.8	25.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	roller	1	20	80		250	0.1		61.7	1	60	55	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		250	0.1		59.7	1	60	56	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	paver	2	50	77	"paving equipment"	250	0.1		58.7	1	60	59	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
Total for Paving Phase:												69.6																
Total for Architectural Coating Phase:												69.6																
Architectural Coating	compressor (air)	1	40	78		75	0.1		73.6	1	60	70	5	5	0	60	15	75	60.2	15.8	75.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase for sensitive wildlife =	60
allowable hours over which Leq is to be averaged =	1

12 = temporary barrier (TB) of input height inserted between source and receptor

Construction Activity	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Temporary Barrier Insertion Loss (dB)	Additional Noise Reduction	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 1-hour Leq	Source Elevation (ft)	Receiver Elevation (ft)	Barrier Height (ft)	Source to Barr. ("A") Horiz. (ft)	Rcvr. to Barr. ("B") Horiz. (ft)	Source to Rcvr. ("C") Horiz. (ft)	"A" (ft)	"B" (ft)	"C" (ft)	Path Length Diff. "P" (ft)	Abarr (dB)	Heff (with barrier)	Heff (wout barrier)	G (with barrier)	G (without barrier)	ILbarr (dB)
Demolition	dozer	1	40	82		25	15.6		72.4	0.08	4.8	57	5	5	12	10	15	25	12.2	16.6	25.0	3.76	15.0	17.0	5.0	0.4	0.7	15.6
	dozer	1	40	82		250	13.5		50.3	1	60	46	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	concrete saw	1	20	90		250	13.5		58.3	1	60	51	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	backhoe	3	40	78		250	13.5		46.3	1	60	47	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
Total for Demolition Phase:													58.9															
Site Preparation	backhoe	4	40	78		250	13.5		46.3	1	60	48	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	dozer	1	40	82		25	15.6		72.4	0.08	4.8	57	5	5	12	10	15	25	12.2	16.6	25.0	3.76	15.0	17.0	5.0	0.4	0.7	15.6
	dozer	2	40	82		250	13.5		50.3	1	60	49	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
Total for Site Preparation Phase:													58.5															
Grading	dozer	1	40	82		250	13.5		50.3	1	60	46	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	backhoe	3	40	78		250	13.5		46.3	1	60	47	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	excavator	1	40	81		250	13.5		49.3	1	60	45	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	grader	1	40	85		25	15.6		75.4	0.08	4.8	60	5	5	12	10	15	25	12.2	16.6	25.0	3.76	15.0	17.0	5.0	0.4	0.7	15.6
Total for Grading Phase:													60.0															
Building Construction	crane	1	16	81		75	14.6		62.0	1	60	54	5	5	12	60	15	75	60.4	16.6	75.0	1.96	15.0	17.0	5.0	0.4	0.7	14.6
	man lift	3	20	75		250	13.5		43.3	1	60	41	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	backhoe	1	40	78		25	15.6		68.4	0.08	4.8	53	5	5	12	10	15	25	12.2	16.6	25.0	3.76	15.0	17.0	5.0	0.4	0.7	15.6
	backhoe	2	40	78		250	13.5		46.3	1	60	45	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	welder / torch	1	40	73		250	13.5		41.3	1	60	37	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	generator	1	50	72		250	13.5		40.3	1	60	37	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
Total for Building Construction Phase:													57.2															
Paving	paver	1	50	77		250	13.5		45.3	1	60	42	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	concrete mixer truck	2	40	79		250	13.5		47.3	1	60	46	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	roller	1	20	80		25	15.6		70.4	0.08	4.8	52	5	5	12	10	15	25	12.2	16.6	25.0	3.76	15.0	17.0	5.0	0.4	0.7	15.6
	roller	1	20	80		250	13.5		48.3	1	60	41	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	backhoe	1	40	78		250	13.5		46.3	1	60	42	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	paver	2	50	77	"paving equipment"	250	13.5		45.3	1	60	45	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
Total for Paving Phase:													54.7															
Architectural Coating	compressor (air)	1	40	78		75	14.6		59.0	1	60	55	5	5	12	60	15	75	60.4	16.6	75.0	1.96	15.0	17.0	5.0	0.4	0.7	14.6
													55.0															
Total for Architectural Coating Phase:																												

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Lesser of or available Lmax	Spec. 721 Lmax	Measured L _{max} @50ft (dBA, slow)
All Other Equipment > 5 HP	No	50	85	85	-- N/A --
Auger Drill Rig	No	20	84	85	84
Backhoe	No	40	78	80	78
Bar Bender	No	20	80	80	-- N/A --
Blasting	Yes	-- N/A --	94	94	-- N/A --
Boring Jack Power Unit	No	50	80	80	83
Chain Saw	No	20	84	85	84
Clam Shovel (dropping)	Yes	20	87	93	87
Compactor (ground)	No	20	80	80	83
Compressor (air)	No	40	78	80	78
Concrete Batch Plant	No	15	83	83	-- N/A --
Concrete Mixer Truck	No	40	79	85	79
Concrete Pump Truck	No	20	81	82	81
Concrete Saw	No	20	90	90	90
Crane	No	16	81	85	81
Dozer	No	40	82	85	82
Drill Rig Truck	No	20	79	84	79
Drum Mixer	No	50	80	80	80
Dump Truck	No	40	76	84	76
Excavator	No	40	81	85	81
Flat Bed Truck	No	40	74	84	74
Front End Loader	No	40	79	80	79
Generator	No	50	72	72	81
Generator (<25KVA, VMS signs)	No	50	70	70	73
Gradall	No	40	83	85	83
Grader	No	40	85	85	-- N/A --
Grapple (on backhoe)	No	40	85	85	87
Horizontal Boring Hydr. Jack	No	25	80	80	82
Hydra Break Ram	Yes	10	90	90	-- N/A --
Impact Pile Driver	Yes	20	95	95	101
Jackhammer	Yes	20	85	85	89
Man Lift	No	20	75	85	75
Mounted Impact Hammer (hoe ram)	Yes	20	90	90	90
Pavement Scarifier	No	20	85	85	90
Paver	No	50	77	85	77
Pickup Truck	No	40	55	55	75
Pneumatic Tools	No	50	85	85	85
Pumps	No	50	77	77	81
Refrigerator Unit	No	100	73	82	73
Rivit Buster/chipping gun	Yes	20	79	85	79
Rock Drill	No	20	81	85	81
Roller	No	20	80	85	80
Sand Blasting (Single Nozzle)	No	20	85	85	96
Scraper	No	40	84	85	84
Shears (on backhoe)	No	40	85	85	96
Slurry Plant	No	100	78	78	78
Slurry Trenching Machine	No	50	80	82	80
Soil Mix Drill Rig	No	50	80	80	-- N/A --
Tractor	No	40	84	84	-- N/A --
Vacuum Excavator (Vac-truck)	No	40	85	85	85
Vacuum Street Sweeper	No	10	80	80	82
Ventilation Fan	No	100	79	85	79
Vibrating Hopper	No	50	85	85	87
Vibratory Concrete Mixer	No	20	80	80	80
Vibratory Pile Driver	No	20	95	95	101
Warning Horn	No	5	83	85	83
Welder / Torch	No	40	73	73	74

Operation Noise Prediction Model Inputs

Point Sources

Name	Sel.	M.	ID	Result: PWL			Lw / Li	Value	norm. dB(A)	Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct	Height	Coordinates		
				Day (dB(A))	Evening (dB(A))	Night (dB(A))	Type			Day dB(A)	Evening dB(A)	Night dB(A)	R	Area (ft²)		Day (min)	Special (min)	Night (min)					(dB)	(Hz)	(ft)
Emergency Generator	-		EGEN	96.7	96.7	96.7	Lw	EGEN		0	0	0					0	(none)		6 r	1098.39	828.22	6		
HVAC Fan			EF-1	59.9	59.9	59.9	Lw	EF1		0	0	0					0	(none)		3 g	1091.75	816.92	24		
HVAC Fan			EF-2	45.9	45.9	45.9	Lw	EF2		0	0	0					0	(none)		3 g	968.43	772.07	27		
HVAC Fan			EF-3	58.9	58.9	58.9	Lw	EF3		0	0	0					0	(none)		3 g	976.77	772.07	27		
Split System Condensing Unit			SSCU-1	71.7	71.7	71.7	Lw	SSCU		0	0	0					0	(none)		2.5 g	974.99	775.77	26.5		
Split System Condensing Unit			SSCU-2	71.7	71.7	71.7	Lw	SSCU		0	0	0					0	(none)		2.5 g	1059.62	789.3	23.5		
Split System Condensing Unit			SSCU-3	71.7	71.7	71.7	Lw	SSCU		0	0	0					0	(none)		2.5 g	1064.68	790.67	23.5		
Split System Condensing Unit			SSCU-4	71.7	71.7	71.7	Lw	SSCU		0	0	0					0	(none)		2.5 g	1054.42	787.8	23.5		
Air Cooled Condensing Unit			CU-1	68.8	68.8	68.8	Lw	CU		0	0	0					0	(none)		5.5 g	1027.22	779.46	26.5		
Packaged Rooftop Heat Pump			RTU-1	63.9	63.9	63.9	Lw	RTU		0	0	0					0	(none)		3.5 g	1023.25	793.2	24.5		
Packaged Rooftop Heat Pump			RTU-2	63.9	63.9	63.9	Lw	RTU		0	0	0					0	(none)		3.5 g	1050.32	800.51	24.5		
Energy Recovery Ventilator			ERV-1	69.7	69.7	69.7	Lw	ERV		0	0	0					0	(none)		4 g	971.58	782.74	28		
Energy Recovery Ventilator			ERV-2	69.7	69.7	69.7	Lw	ERV		0	0	0					0	(none)		4 g	1061.67	802.83	25		
Amphitheatre Speaker 1	-		AMPS1	96	96	96	Lw	vocal		0	0	0			-95.2		0	(none)		5 r	929.17	755.5	5		
Amphitheatre Speaker 2	-		AMPS2	96	96	96	Lw	vocal		0	0	0			-95.2		0	(none)		5 r	957.1	755.5	5		
Outdoor Patio Speaker 1	+		OPS1	90	90	90	Lw	vocal		0	0	0			-89.2		0	(none)		5 r	1035.88	744.47	5		
Outdoor Patio Speaker 2	+		OPS2	90	90	90	Lw	vocal		0	0	0			-89.2		0	(none)		5 r	1066.39	753.86	5		

Area Sources

Name	Sel.	M.	ID	Result: PWL			Result: PWL"			Lw / Li Type	Value	norm. dB(A)	Correction			Sound Reduction		Attenuatio	Operating Time			K0	Freq. (Hz)	Direct.	Moving Pt. Src	
				Day Day (dBA)	Evening Evening (dBA)	Night Night (dBA)	Day Day (dBA)	Evening Evening (dBA)	Night Night (dBA)				Day dB(A)	Evening dB(A)	Night dB(A)	R	Area (ft²)		Day (min)	Special (min)	Night (min)				(dB)	Day
8 Idling Car Engines	+		8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0	0		21.1-9			0	(none)				
8 Idling Car Engines	+		8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0	0		21.1-9			0	(none)				
7Idling Car Engines	+		7Parked	72.5	72.5	72.5	56.4	56.4	56.4	Lw	Car		0	0	0	0		21.1-8.5			0	(none)				
6Idling Car Engines	+		6Parked	71.8	71.8	71.8	56.3	56.3	56.3	Lw	Car		0	0	0	0		21.1-7.8			0	(none)				
3Idling Car Engines	+		3Parked	68.8	68.8	68.8	56.9	56.9	56.9	Lw	Car		0	0	0	0		21.1-4.8			0	(none)				
7Idling Car Engines	+		7Parked	72.5	72.5	72.5	56.4	56.4	56.4	Lw	Car		0	0	0	0		21.1-8.5			0	(none)				
8Idling Car Engines	+		8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0	0		21.1-9			0	(none)				
3Idling Car Engines	+		3Parked	68.8	68.8	68.8	55.5	55.5	55.5	Lw	Car		0	0	0	0		21.1-4.8			0	(none)				
18Idling Car Engines	+		18Parked	76.6	76.6	76.6	56.2	56.2	56.2	Lw	Car		0	0	0	0		21.1-12.6			0	(none)				
18Idling Car Engines	+		18Parked	76.6	76.6	76.6	56.2	56.2	56.2	Lw	Car		0	0	0	0		21.1-12.6			0	(none)				
2Idling Car Engines	+		2Parked	67	67	67	55.3	55.3	55.3	Lw	Car		0	0	0	0		21.1-3			0	(none)				
2Idling Car Engines	+		2Parked	67	67	67	55.3	55.3	55.3	Lw	Car		0	0	0	0		21.1-3			0	(none)				
1Idling Car Engines	+		1Parked	64	64	64	56.3	56.3	56.3	Lw	Car		0	0	0	0		21.1			0	(none)				
1Idling Car Engines	+		1Parked	64	64	64	56.7	56.7	56.7	Lw	Car		0	0	0	0		21.1			0	(none)				
1Idling Car Engines	+		1Parked	64	64	64	56.7	56.7	56.7	Lw	Car		0	0	0	0		21.1			0	(none)				
1Idling Car Engines	+		1Parked	64	64	64	53.6	53.6	53.6	Lw	Car		0	0	0	0		21.1			0	(none)				
1Idling Car Engines	+		1Parked	64	64	64	53.6	53.6	53.6	Lw	Car		0	0	0	0		21.1			0	(none)				
21Idling Car Engines	+		21Parked	77.2	77.2	77.2	56.2	56.2	56.2	Lw	Car		0	0	0	0		21.1-13.2			0	(none)				
21Idling Car Engines	+		21Parked	77.2	77.2	77.2	56.2	56.2	56.2	Lw	Car		0	0	0	0		21.1-13.2			0	(none)				
21Idling Car Engines	+		21Parked	77.2	77.2	77.2	56.2	56.2	56.2	Lw	Car		0	0	0	0		21.1-13.2			0	(none)				
8 Idling Car Engines	+		8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0	0		21.1-9			0	(none)				
3Idling Car Engines	+		3Parked	68.8	68.8	68.8	56.9	56.9	56.9	Lw	Car		0	0	0	0		21.1-4.8			0	(none)				
8 Idling Car Engines	+		8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0	0		21.1-9			0	(none)				
8 Idling Car Engines	+		8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0	0		21.1-9			0	(none)				
8 Idling Car Engines	+		8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0	0		21.1-9			0	(none)				
8 Idling Car Engines	+		8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0	0		21.1-9			0	(none)				
8 Idling Car Engines	+		8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0	0		21.1-9			0	(none)				
8 Idling Car Engines	+		8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0	0		21.1-9			0	(none)				
8 Idling Car Engines	+		8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0	0		21.1-9			0	(none)				
11 Idling Car Engines	+		11Parked	74.4	74.4	74.4	56	56	56	Lw	Car		0	0	0	0		21.1-10.4			0	(none)				
26Idling Car Engines	+		26Parked	78.1	78.1	78.1	56	56	56	Lw	Car		0	0	0	0		21.1-14.1			0	(none)				
Event with Fireworks	-		Fireworks	137	137	137	98.1	98.1	98.1	Lw	Fireworks		0	0	0	0		-58.1			0	1000	(none)			
Amphitheatre Event Crowd - 100 ppl, Haynes Loud, 50% time	-		AEC	90	90	90	66	66	66	Lw	vocal		0	0	0	0		-89.2			0	(none)				
Outdoor Patio Event Crowd - 80 ppl, Haynes Loud, 50% time	+		OPEC	87	87	87	63.9	63.9	63.9	Lw	vocal		0	0	0	0		-86.2			0	(none)				

Vert Area Sources

Name	Sel.	M.	ID	Result: PWL			Result: PWL"			Lw / Li		Value	norm. dB(A)	Correction			Sound Reduction		Attenuatio	Operating Time			K0	Freq.	Direct.
				Day (dBA)	Evening (dBA)	Night (dBA)	Day (dBA)	Evening (dBA)	Night (dBA)	Type				Day dB(A)	Evening dB(A)	Night dB(A)	R	Area (ft²)		Day (min)	Special (min)	Night (min)	(dB)	(Hz)	
Indoor Event Interior to Exterior	-		Event	65.8	65.8	65.8	58.8	58.8	58.8	Lw	vocal			0	0	0				-65				3	(none)
	-			65.8	65.8	65.8	58.8	58.8	58.8	Lw	vocal			0	0	0				-65				3	(none)
	-			65.8	65.8	65.8	68.1	68.1	68.1	Lw	vocal			0	0	0				-65				3	(none)

Barriers

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height
				left	right		horz.	vert.	Begin
						(ft)	(ft)	(ft)	(ft)
Parapet			Parapet						6
Concrete Masonry Unit			CMU						9 r

Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height Begin (ft)
Event Center			Event				21 r
Lobby Multi Purp			Lobby				24 r
Existing YMCA Bldg			YMCA				40 r
Lobby Roof Ceiling			Ceiling				29 a

AHUs (plenum-type return fan only, no condenser units [see separate worksheet]):

Building Minimum Ventilation

percent GSF actually occupied (and need ventilation): 90

AHUs (plenum-type return fan only, no condenser units [see separate worksheet]):

Building Minimum Ventilation

percent GSF actually occupied (and need ventilation):

90

A-weighting adjustments

average of values for the two fan diameter ranges, per Guyer (Table 12)

average of values for the two fan diameter ranges, per Guyer (Table 12)

per Guyer (Table 12, presumed based on Bies & Hansen ENC)

plug

tube

prop

40

47

46

40

44

48

38

46

55

34

47

53

29

44

52

23

45

48

19

38

43

16

35

38

A-weighted PWL (for CadnaA inputs)

63

125

250

500

1000

2000

4000

8000

OA dB

Tag

Building

GSF

Avail. SF

Height (ft)

Avg. minutes to change air*

Volume (ft3)

CFM

m²

comparable facility function

Pressure (iwg)

Pressure (Pa)

Q (m³/s)

fantype = plug, tube, or prop

return air fans in building rooftop AHUs:

RTU 1 / 2

EF-1

EF-1

EF-3

Santee Rec Center

kitchen

janitor

restroom

2876

760

119

867

2588

684

107

780

3.5

3.5

3.5

3.5

3

3

3

3

9059

2394

375

2731

3019.8

798

124.95

910.35

241

10

73

73

residences

residences

residences

residences

1.25

1.5

0.75

1.25

312.5

375

187.5

312.5

1

0

0

0

plug

plug

plug

plug

45

41

27

40

57

53

39

52

58

54

40

53

59

55

41

54

56

52

38

51

49

45

31

44

43

39

25

38

38

34

20

33

64

60

46

59

fan or AHU cabinet liner/interior attenuation (excludes inlet/outlet PWL split, already in calcs above:

2

3

4

5

6

8

10

10

*from 3-10 minute range for "retail stores", 2-5 minute range for "residences" per Loren Cook's "Engineering Cookbook", 1999 edition, p. 41

ACCs (air-cooled chillers on rooftops):
Building Interior Comfort

with or without sound insulation? (enter Y/N):

unweighted PWL (dB) per OCBF (Hz) at full load (100%)

	tons	LWA	63	125	250	500	1000	2000	4000	8000
Bryant BH116-018 (no sound blanket)	1.5	67	66.2	66.2	63.9	63.8	62.3	58.4	56.4	50.3
Bryant BH116-024 (no sound blanket)	2	71	65	65	63.7	63.4	68.5	64.7	58.7	52.8
Bryant BH116-036 (no sound blanket)	3	71	68.2	68.2	66.4	67.5	68.4	59.6	58.2	52.4
Bryant BH116-048 (no sound blanket)	4	71	68.4	68.4	67.7	69.7	67.6	59.4	56.4	50
Bryant BH116-060 (no sound blanket)	5	69	63.7	63.7	65.4	67.3	64.9	58.3	56.2	51.9
Dakin AGZ-E 30 (w/out sound insulation)	30	85	84	84	83	84	77	75	74	70
Dakin AGZ-E 40 (w/out sound insulation)	40	85	84	84	83	84	77	75	74	70
Dakin AGZ-E 50 (w/out sound insulation)	50	87	85	85	85	86	80	77	75	70
Dakin AGZ-E 60 (w/out sound insulation)	60	87	85	85	85	86	80	77	75	70
Dakin AGZ-E 70 (w/out sound insulation)	70	87	85	85	85	86	80	77	75	70
Dakin AGZ-E 80 (w/out sound insulation)	80	88	86	85	87	86	81	81	77	71
Dakin AGZ-E 90 (w/out sound insulation)	90	88	88	87	87	86	83	80	77	71
Dakin AGZ-E 120 (w/out sound insulation)	120	89	91	85	88	86	82	81	79	72
Dakin AGZ-E 240 (w/out sound insulation)	241	94	94	88	91	90	91	84	82	75

data for models "without sound insulation" or no "sound blankets"

LWA	63	125	250	500	1000	2000	4000	8000
68	66.2	66.2	63.8	64.1	64.6	59.9	57.7	53.6
72	63.4	63.4	63.3	63.3	70.4	64.5	59.3	55.5
72	67.7	67.7	66.8	68.1	69.9	62.8	60.3	55.2
73	67.5	67.5	67.8	70.1	70.6	63.1	58.5	53.3
70	61.7	61.7	65.6	68.1	65.8	59.8	58.4	56.1
88	92	91	88	87	83	78	73	68
89	92	91	90	88	84	79	74	69
90	93	93	91	89	85	79	74	69
91	94	93	94	89	86	81	76	71
92	95	95	94	89	87	81	76	71
92	95	95	95	89	87	81	76	71
93	94	95	92	91	89	83	81	88
95	93	96	92	92	90	84	84	82
100	98	98	98	95	96	90	90	86

data for models "with sound insulation" or "sound blankets"

LWA	63	125	250	500	1000	2000	4000	8000
67	66.2	66.2	63.9	63.8	62.3	58.4	56.4	50.3
71	65	65	63.7	63.4	68.5	64.7	58.7	52.8
71	68.2	68.2	66.4	67.5	68.4	59.6	58.2	52.4
71	68.4	68.4	67.7	69.7	67.6	59.4	56.4	50
69	63.7	63.7	65.4	67.3	64.9	58.3	56.2	51.9
85	84	84	83	84	77	75	74	70
85	84	84	83	84	77	75	74	70
87	85	85	85	86	80	77	75	70
87	85	85	85	86	80	77	75	70
87	85	85	85	86	80	77	75	70
88	86	85	87	86	81	81	77	71
88	88	87	87	86	83	80	77	71
89	91	85	88	86	82	81	79	72
94	94	88	91	90	91	84	82	75

actual percent of GSF occupied:

Phase	Building Tag	GSF	Avail. SF	comparable facility function	Avg. GSF per ton ^a	tons of refri.	Approx. Qty. of ACCs	tons per ACC	Approx. Total PWL (dBA)
CU	Santee Rec Center	15171	13730	Auditorium	625	22.0	1	22	69
SSCU	Santee Rec Center	15171	13730	Auditorium	5500	2.5	1	2	71
ERV	Santee Rec Center	1474	1334	Auditorium	345	3.9	2	2	70

^abased upon "to" value per Loren Cook's "Engineering Cookbook", 1999 edition, pp. 59-60

Sound Levels (local)																																	
Name	ID	Type	1/3 Oktave Spectrum (dB)																														
			Weight:	25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	A	lin	Source
Emergency Generator	EGEN	Lw	A					96.7						58			59			56			49			43			38		96.7	122.9	Syska Hennessy Group 85 dBA @ 5 feet w/ enclosure
Rooftop Heat Pump	RTU	Lw	A					45			57				58		59												34		63.9	76.1	
Kitchen HVAC Fan	EF1	Lw	A					41			53				54		55			52			45			39			38		59.9	72.1	
Janitor Closet HVAC Fan	EF2	Lw	A					27			39				40		41			38			31			25			20		45.9	58.1	
Restroom HVAC Fan	EF3	Lw	A					40			52				53		54			51			44			38			33		58.9	71.1	
Air Cooled Condensing Unit	CU	Lw						64			64				65		67			65			58			56			52		68.8	72.4	
Split System Condensing Unit	SSCU	Lw						65			65				64		63			69			65			59			53		71.7	73.6	
Energy Recovery Ventilator	ERV	Lw						69			69				67		67			65			61			59			53		69.7	75	
Parking (Idling Cars)	Car	Lw	A		62.5			66.5			70.5				74.6		77.6			80.6			78.6			73.6			68.6		85.1	102.6	forum SCHALL, Emissionsdatenkatolog, August 2016
Speech Spectrum	vocal	Lw	A		-13			-10			-7				-5		-5			-8			-14			-20			-26		0.8	26.9	Hayne 2006
Fireworks	Fireworks	Lw		49.3	49.9	51.2	57.6	63.3	67.6	64.2	61.8	57.1	58	65.9	67	68	69.3	71.5	72.9	76.4	71.7	76.2	75.7	75.1	72.7	70.6	64.9	62.8	58.2	52.4	84.5	84.4	Size 4 type Lmax - Tanaka, Inaba, Aoyama 2016

Traffic Noise Model Calculations

Traffic Noise Modeling Calculations - Summary

[illegible]

To

**Δ Cumulative
– Cumulative +
Project**

1	Riverwalk Drive	Cuyamaca Street	Verde Vista Lane
2	Riverwalk Drive	Verde Vista Lane	Canopy Park Lane
3	Riverwalk Drive	Canopy Park Lane	Park Center Drive

0.7

1.1

0.9 |

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Model Calculations

Project: 14169Santee Recreation Center

Number	Name	Segment Description and Location
		From
1	...	...
2	...	...
3	...	...
4	...	...
5	...	...
6	...	...
7	...	...
8	...	...
9	...	...
10	...	...
11	...	...
12	...	...
13	...	...
14	...	...
15	...	...
16	...	...
17	...	...
18	...	...
19	...	...
20	...	...
21	...	...
22	...	...
23	...	...
24	...	...
25	...	...
26	...	...
27	...	...
28	...	...
29	...	...
30	...	...
31	...	...
32	...	...
33	...	...
34	...	...
35	...	...
36	...	...
37	...	...
38	...	...
39	...	...
40	...	...
41	...	...
42	...	...
43	...	...
44	...	...
45	...	...
46	...	...
47	...	...
48	...	...
49	...	...
50	...	...
51	...	...
52	...	...
53	...	...
54	...	...
55	...	...
56	...	...
57	...	...
58	...	...
59	...	...
60	...	...
61	...	...
62	...	...
63	...	...
64	...	...
65	...	...
66	...	...
67	...	...
68	...	...
69	...	...
70	...	...
71	...	...
72	...	...
73	...	...
74	...	...
75	...	...
76	...	...
77	...	...
78	...	...
79	...	...
80	...	...
81	...	...
82	...	...
83	...	...
84	...	...
85	...	...
86	...	...
87	...	...
88	...	...
89	...	...
90	...	...
91	...	...
92	...	...
93	...	...
94	...	...
95	...	...
96	...	...
97	...	...
98	...	...
99	...	...
100	...	...

Input

Output

Distance to Directional Centerline, (feet)₄

Traffic Distribution Characteristics

Ldn, (dBA) _{5,6,7}	Distance to Contour, (feet) ₃			
	70 dBA	65 dBA	60 dBA	55 dBA

Existing Conditions

[illegible]

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Model Calculations

Project: 14169Santee Recreation Center

Ldn
Hard
Peak
10

Segment Description and Location

[illegible]

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Model Calculations

Noise Level Descriptor:	Ldn
Site Conditions:	Hard
Traffic Input:	Peak
Traffic K-Factor:	10

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Model Calculations

Noise Level Descriptor:	Ldn
Site Conditions:	Hard
Traffic Input:	Peak
Traffic K-Factor:	10

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.